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Presented on 23 September 1998

United States Senate  
Committee on Commerce, Science, and Transportation  
Subcommittee on Science, Technology, and Space  
Washington, DC 20510-6125

Attention: Senator Bill Frist  
Chairman

Subject: Facilitating the Growth of the U.S. Commercial Launch Industry

Dear Mr. Chairman:

Thank you, Mr. Chairman, for the invitation to speak to the Subcommittee on Science, Technology, and Space. It is my pleasure to present the Space Access view on what the Government could do to make the U.S. commercial launch industry more globally competitive.

First, let me start with some background on our view of the industry. There is tremendous momentum today in the industry resulting from over forty years of very close relationships between the Government and the major domestic aerospace firms. These relationships have served our country well: from the initial development of Inter-Continental Ballistic Missiles to the race to the moon, and more recently, the fielding of the Space Shuttle. Each of these was an incredible feat, and given such successes, there is certainly a normal reluctance to change course. Meanwhile, the United States captures only a small portion of the global commercial launch services market because today's launch services customers are looking for more readily available and reliable launch services at a lower cost than those currently being offered by the existing domestic launch systems. Incremental improvements will yield only incremental payoff. Therefore, breakthrough technologies are required to significantly improve the status quo.

Our firm, Space Access, has been commercially developing such breakthrough technologies since 1994 with a combination of both private investment and industry funding and, let me emphasize, with zero Government funding. We have designed a multi-stage, reusable launch system, the first stage of which takes off from a runway like an airplane, propelled by means of proprietary air-breathing ejector ram jet engines. Our proof-of-concept tests of the engines have already demonstrated their

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performance is 700% more efficient than the best rocket, and over 50% more efficient than even supersonic turbojet engines. This increased performance has allowed us to design our launch system to standard FAA aircraft specifications with safety factors which provide up to three times greater redundancy than that provided by current rocket-based launch vehicles.

The problem, however, for an entrepreneurial firm like ours is to raise the required financing to bring breakthrough technology to market and thereby provide the new products to help make the U.S. more globally competitive. The Government could help to correct this situation by serving as a catalyst for additional commercial investment. Our recommendations include:

1. Government loan guarantees: The cost and availability of money present particular challenges for an entrepreneurial firm on a project of this magnitude, much more so than for companies with marquee names. Space Access has contracted with Donaldson, Lufkin and Jenrette Securities (DLJ) of New York to help raise the required capital. However, even after their successful due-diligence review of our firm, and even with their record of success at raising over thirteen billion dollars for other space related ventures, the investment community they attract is still reticent to provide entrepreneurs like us with the required capital at reasonable rates. Hence, Government loan guarantees would greatly facilitate the capital raising process, reduce the financing expense significantly, and allow a greater amount of the capital raised to be used for its intended purpose: advanced technology product development.

1. Tax incentives: Tax incentives to investors and/or developers would serve as a means to stimulate commercial investments by making the space industry a "growth industry" target for available capital.

1. Advanced purchase agreements: The U.S. Government would receive its "best value" by purchasing commercially available space transportation products and services to the fullest extent feasible in accordance with the National Space Transportation Policy. Associated advance payment funds could then be used by entrepreneurs as leverage to raise additional capital, facilitating the expansion of the U.S. capability to serve both the global launch services market and its own interests.

Ensuring the equitable allocation of such incentives is essential. Many great ideas come from entrepreneurial firms, and the Government must be careful not to fall into the trap of disbursing any incentives in a manner that only reinforces the status quo. We were recently selected by NASA to assist them in preparing a Space Transportation Architecture for the future, and we intend to include our specific recommendations for equitably allocating incentives in that report.

It would be my pleasure to provide greater detail on any of these points and to work

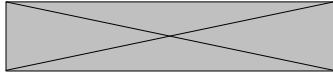
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with the Government to define a specific set of incentives together with the associated guidelines for their implementation.

This concludes my remarks, and on behalf of the Space Access team, we appreciate your interest and attention. I would be happy to answer any questions you may have.

Very truly yours,

SPACE ACCESS, LLC



Stephen G. Wurst  
President